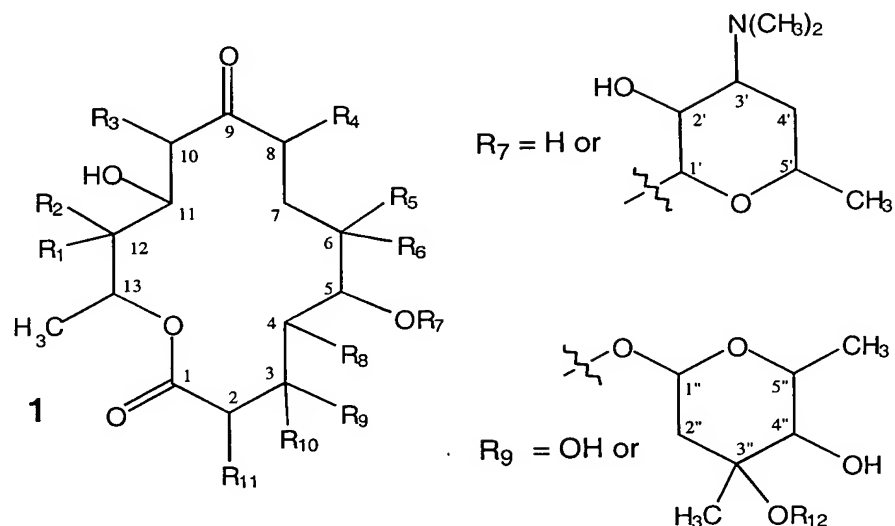


### Amendments to the Claims:

Claims 1-26 (Cancelled)

Claim 27 (Currently Amended): A process for the production of compounds of formula 1:



and to pharmaceutically acceptable salts thereof, wherein:

$R_1$  is H or OH;  $R_2$ - $R_4$  are each independently H,  $\text{CH}_3$ , or  $\text{CH}_2\text{CH}_3$ ;  $R_5$  is H or OH; and  $R_6$  is H,  $\text{CH}_3$ , or  $\text{CH}_2\text{CH}_3$ ;  $R_7$  is H or desosamine;  $R_8$  is H,  $\text{CH}_3$ , or  $\text{CH}_2\text{CH}_3$ ;  $R_9$  is OH, mycarose ( $R_{12}$  is H), or cladinose ( $R_{12}$  is  $\text{CH}_3$ ),  $R_{10}$  is H; or  $R_9 = R_{10} = \text{O}$ ; and  $R_{11}$  is H,  $\text{CH}_3$ , or  $\text{CH}_2\text{CH}_3$ , with the proviso that when  $R_2$ - $R_4$  are  $\text{CH}_3$ ,  $R_6$  is  $\text{CH}_3$ ,  $R_8$  is  $\text{CH}_3$ , and  $R_{11}$  is  $\text{CH}_3$ , then  $R_1$  and  $R_5$  are not H and  $R_{12}$  is not H; or also when  $R_2$ - $R_4$  are  $\text{CH}_3$ ,  $R_6$  is  $\text{CH}_3$ ,  $R_8$  is  $\text{CH}_3$ , and  $R_{11}$  is  $\text{CH}_3$ , then  $R_1$  and  $R_5$  are not OH and  $R_{12}$  is not H;

said process comprising culturing a transformant organism which contains a DNA gene assembly which produces a 14-membered macrolide, said gene assembly comprising a loading module of the form KSq-ATq-ACP where:

- KSq represents a domain operative to decarboxylate a malonate substrate carried by the ACP;
- ATq represents an acyltransferase domain operative to load selectively a malonate unit onto the ACP; and

c) ACP represents an acyl carrier protein and a plurality of extension modules, wherein said extension modules are not usually associated with a loading module that effects decarboxylation of a malonyl residue.

Claim 28 (Previously Presented): The process of claim 27, wherein the loading module is selected from the oleandomycin, spiramycin, niddamycin, methymycin or monensin PKSs.

Claim 29 (Currently Amended): The process of claim 27, wherein the plurality of extension modules correspond to the extension modules of a PKS selected from the group consisting of erythromycin, PKS narbomycin, pikromycin, lankamycin, kujimycin, and megalomycin.

Claim 30 (Previously Presented): The process of claim 28, wherein the plurality of extension modules correspond to the extension modules of the erythromycin PKS.

Claim 31 (Previously Presented): The process of claim 27, wherein the organism is selected from the group consisting of: *Saccharopolyspora erythraea*, *Streptomyces coelicolor*, *Streptomyces avermitilis*, *Streptomyces griseofuscus*, *Streptomyces cinnamonensis*, *Streptomyces fradiae*, *Streptomyces longisporoflavus*, *Streptomyces hygroscopicus*, *Micromonospora griseorubida*, *Streptomyces lasaliensis*, *Streptomyces venezuelae*, *Streptomyces antibioticus*, *Streptomyces lividans*, *Streptomyces rimosus*, *Streptomyces albus*, *Amycolatopsis mediterranei*, and *Streptomyces tsukubaensis*.

Claim 32 (Previously Presented): The process of claim 28, wherein the organism is selected from the group consisting of: *Saccharopolyspora erythraea*, *Streptomyces coelicolor*, *Streptomyces avermitilis*, *Streptomyces griseofuscus*, *Streptomyces cinnamonensis*, *Streptomyces fradiae*, *Streptomyces*

*longisporoflavus*, *Streptomyces hygrosopicus*, *Micromonospora griseorubida*, *Streptomyces lasaliensis*, *Streptomyces venezuelae*, *Streptomyces antibioticus*, *Streptomyces lividans*, *Streptomyces rimosus*, *Streptomyces albus*, *Amycolatopsis mediterranei*, and *Streptomyces tsukubaensis*.

Claim 33 (Previously Presented): The process of claim 29, wherein the organism is selected from the group consisting of: *Saccharopolyspora erythraea*, *Streptomyces coelicolor*, *Streptomyces avermitilis*, *Streptomyces griseofuscus*, *Streptomyces cinnamonensis*, *Streptomyces fradiae*, *Streptomyces longisporoflavus*, *Streptomyces hygrosopicus*, *Micromonospora griseorubida*, *Streptomyces lasaliensis*, *Streptomyces venezuelae*, *Streptomyces antibioticus*, *Streptomyces lividans*, *Streptomyces rimosus*, *Streptomyces albus*, *Amycolatopsis mediterranei*, and *Streptomyces tsukubaensis*.

Claim 34 (Previously Presented): The process of claim 30, wherein the organism is selected from the group consisting of: *Saccharopolyspora erythraea*, *Streptomyces coelicolor*, *Streptomyces avermitilis*, *Streptomyces griseofuscus*, *Streptomyces cinnamonensis*, *Streptomyces fradiae*, *Streptomyces longisporoflavus*, *Streptomyces hygrosopicus*, *Micromonospora griseorubida*, *Streptomyces lasaliensis*, *Streptomyces venezuelae*, *Streptomyces antibioticus*, *Streptomyces lividans*, *Streptomyces rimosus*, *Streptomyces albus*, *Amycolatopsis mediterranei*, and *Streptomyces tsukubaensis*.

Claim 35 (Currently Amended): The process of claim 27, which additionally comprises recovering the compound produced by said process ~~a compound of formula 1~~.

Claim 36 (New): The process of claim 27, wherein said compound is 15-norerythromycin A.

Claim 37 (New): The process of claim 27, wherein said compound is 15-norerythromycin B.

Claim 38 (New): The process of claim 27, wherein said KSq domain is obtained by replacing the active site cysteine of a KS domain of an extension module with a glutamine.

Claim 39 (New): The process of claim 27, wherein said ATq domain is obtained by replacing the active site residue of an AT domain of an extension module with an arginine.